

### **REASONS FOR ALLOWANCE**

The instant invention is deemed to be directed to an unobvious improvement over the invention patented in U. S. Patent Nos. 5,067,390 to Negishi and 4,777,868 to Larsson. The improvement comprises a double-acting deformable fluid actuator with a third axisymmetrical coaxial membrane, constrained by two end pieces, in order to identify an intermediate chamber supplied with fluid under pressure through a connector on one of the end pieces for the purposes of providing higher thrust and enabling modulatable operation.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **PRIOR ART**

The patents to Negishi and Larsson is cited for the showing of double-acting deformable fluid actuators similar to applicant's but lacking a third axisymmetrical coaxial membrane.

Prior art made of record but not relied upon is considered pertinent to Applicant's disclosure and consists of four patents.

Wright et al., Bradbury, Caines, and Gaylord are cited to show deformable fluid actuators with membranes.

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***Contact Information***

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thomas Lazo whose telephone number is (571) 272-4818. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Edward Look, can be reached on (571) 272-4820. The fax phone number for this Group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Art Unit 3745  
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